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APPLICATION NO.	FILING DA	ATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/667,188	09/17/2003		Satoru Iguchi	PC25301A	8576
28523	7590 01/21/2005		EXAMINER		
PFIZER INC.				HUANG, EVELYN MEI	
PATENT DEPARTMENT, MS8260-1611 EASTERN POINT ROAD				ART UNIT	PAPER NUMBER
GROTON, CT 06340				1625	
				DATE MAILED: 01/21/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(a)				
	Application No.	Applicant(s) IGUCHI ET AL.				
Office Action Summary	10/667,188					
cines / iouen cummuny	Examiner	Art Unit				
The MAIL INC DATE of this communication on	Evelyn Huang	1625				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address -				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 25 O	ctober 2004.					
	action is non-final.					
3) Since this application is in condition for alloward	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 13-20 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 13-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.	•				
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ acc	epted or b) $\square$ objected to by the E	Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct		• •				
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document: 2. Certified copies of the priority document: 3. Copies of the certified copies of the priority document: application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	atent Application (PTO-152)				

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#### **DETAILED ACTION**

1. Claims 13-20 are pending. Claims 1-12 have been canceled according to the amendment filed on 10-25-2005.

### Claim Rejections - 35 USC § 112

2. The cancellation of Claim 11 has rendered moot the rejection under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. However, new claims 19-20 are subjected to the written description rejection for the following reasons.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. A full description of the inventive compound as agonists and/or antagonists of the 5-HT4 receptors is not found in the specification. The instant method for agonizing 5-HT4 receptors or antagonizing the 5-HT4 receptors reaches out to as yet unidentified diseases/conditions/activities, the description of which is not found in the specification.

#### Claim Rejections - 35 USC § 112(1)

3. The rejection for Claims 10-12 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement is rendered moot by the cancellation of these claims. However, new claims 10-20 are subjected to the enablement rejection for the following reasons.

Biological pathways by themselves are devoid of identifiable utility and are therefore not useful. Unless the pathway at issue is critical to treating some condition and the pathway modification and disease treatment are inexorably linked, such pathway modification is devoid of utility. The instant claim directed to a mechanism of agonizing or antagonizing 5-HT4 receptors without the end result would therefore have no practical utility unless the agonism or antagonism of 5-HT4 receptors and treatment of diseases are inexorably linked.

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At the time of the invention, a nexus between the activation or inhibition of 5-HT4 receptors and the treatment or prevention of any or all of the recited diseases have not been fully established (Barnes et al. Neuropharmacology 38(1999) 1083-1185, 1118-1125). Furthermore, since the claims as recited embrace any degree of agonizing or antagonizing 5-HT4 receptors, which may or may not inexorably linked to the treatment of any or all the diseases recited, the scope of the claims therefore does not commensurate with that of the objective enablement, especially in view of the absence of a full written description of the as yet unidentified conditions/activities/disorders which the recited mechanism reaches out to. One of ordinary skill in the art therefore would not be able to use the inventive compound as claimed without undue experimentation.

#### Claim Rejections - 35 USC § 102

4. The rejection for Claims 1-12 under 35 U.S.C. 102(e) as being anticipated by Uchida (6624162) is rendered moot by the cancellation of these claims.

#### **Double Patenting**

- 5. The rejection for Claims 1-12 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 8-11 of U.S. Patent No. 6624162 is rendered moot by the cancellation of these claims.
- 6. The provisional rejection for claims 1-12 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the corresponding claims of copending Application No. 10/617920 (division of 6624162) is rendered moot by the cancellation of these claims.

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## Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida (6624162, with an effective filing date of 10-2-2001, and is available as prior art under 102(e)).

Uchida generically discloses and claims a 5-HT4 receptor binding compound, its composition and method of use (claims 1-5, 8-11). Specific compounds are described and claimed (claims 6-7).

The compound of Uchida's claim 6 has a butyl whereas the compound of instant claim 17 has an isobutyl as R3 (corresponding Uchida's R6).

Butyl and isobutyl, however, are optional choices within the  $C_{1-5}$  alkyl of R6 (column 54, claim 5, line 24; definition of alkyl is found on column 3, lines 17-20, wherein butyl and isobutyl are expressly described).

At the time of the invention, one of ordinary skill in the art would be motivated to replace Uchida's butyl with the alternative isobutyl to arrive at the instant invention, with the reasonable expectation of obtaining an additional compound with 5HT4 binding activity, since Uchida had expressly taught that any species within the disclosed genus, especially the preferred genus, would be an effective 5HT4 ligand.

#### **Double Patenting**

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

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F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 13-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6624162. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Uchida generically discloses and claims a 5-HT4 receptor binding compound, its composition and method of use (claims 1-5, 8-11). Specific compounds are described and claimed (claims 6-7).

The compound of Uchida's claim 6 has a butyl whereas the compound of instant claim 17 has an isobutyl as R3 (corresponding Uchida's R6).

Butyl and isobutyl, however, are optional choices within the  $C_{1-5}$  alkyl of R6 (column 54, claim 5, line 24; definition of alkyl is found on column 3, lines 17-20, wherein butyl and isobutyl are expressly described).

At the time of the invention, one of ordinary skill in the art would be motivated to replace Uchida's butyl with the alternative isobutyl within the C<sub>1-5</sub> alkyl to arrive at the instant invention, with the reasonable expectation of obtaining an additional compound with 5HT4 binding activity, since Uchida had expressly taught that any species within the disclosed genus, especially the preferred genus, would be an effective 5HT4 ligand.

9. Claims 13-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application No. 10/617920 (division of 6624162). Although the conflicting claims are not identical, they are not patentably distinct from each other because of reasons set forth in the preceding paragraph.

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This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### Conclusion

- 10. No claims are allowed.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 571-272-0686. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Evelyn Huang Primary Evamin

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